

Amendments to the Claims:

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Currently amended) A method of image enhancement employing partial-template matching, the method comprising ~~the steps of~~:
storing consecutive lines of an image;
selecting from the image a window comprising a plurality of line segments of bits representing pixels, the window including a target pixel;
comparing a pixel-bit subset of the window as defined by a mask of a template with a prediction-bit subset as defined by a pattern of the template for a partial match;
assigning weights to each matched bit identified during the comparison;
multiplying each matched bit by its assigned weight pursuant to determining whether there is a partial match; and
responsive to a partial match being found, substituting an enhancement pixel for the target pixel.
5. (Amended) The method of claim 4, wherein the pixel-bit subset includes the target pixel.

6. (Amended) The method of claim 4, wherein the pixel-bit subset further includes pixels from the same line as the target pixel as well as pixels from at least one line above and at least one line below the target pixel.

7. (Original) The method of claim 4, wherein the prediction-bit subset includes a designation of the pixel-bit subset for comparison.

8. (Original) The method of claim 4, wherein the template includes an enhancement pixel to be substituted for the target pixel when a partial match is found.

9. (Canceled)

10. (Original) The method of claim 4, wherein the partial match is found if at least 90 percent of the bits of the pixel-bit subset compare with the prediction-bit subset.

11. (Original) The method of claim 4, wherein the partial match is found if at least 80 percent of the bits of the pixel-bit subset compare with the prediction-bit subset.

12. (Amended) The method of claim 4, wherein the comparing ~~step includes a further step of comprises~~ comparing a prediction-bit subset of a first template to a first pixel-bit subset of the window, and comparing a second prediction-bit subset of a second template to a second pixel-bit subset.

13. (Amended) The method of claim 12, ~~including a further comprising step of~~, if a partial match is found with a plurality of prediction-bit subsets, applying a priority scheme to determine which of the partially matched prediction-bit subsets is used to substitute the enhanced pixel in response to the partial match.

14. (Amended) The method of claim 12, wherein the substitution ~~step further comprises includes a step of~~ selectively modifying the target pixel based on a comparison of the target pixel and the target pixel determined by the matched prediction-bit subset.

15. (Amended) The method of claim 4, further comprising including:
~~a further step of~~ selecting at least one template from a plurality of templates, at least two of the templates of the plurality of templates being responsive to different errors in the target pixel, and each template including an enhancement pixel;

wherein the comparing step ~~further includes~~ comprises comparing a pixel-bit subset of the window as defined by a mask of a template with a prediction-bit subset as defined by a pattern of the selected template for a partial match; and

wherein, ~~the responsive step further includes~~ in response to a partial match being found with the selected template, ~~substituting~~ the enhancement pixel of the partially matched selected template is substituted for the target pixel.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (New) A method of image enhancement employing partial-template matching, the method comprising:

storing consecutive lines of an image;

selecting from the image a window comprising a plurality of line segments of bits representing pixels, the window including a target pixel;

comparing a first prediction-bit subset of a first template to a first pixel-bit subset of the window for a partial match;

comparing a second prediction-bit subset of a second template to a second pixel-bit subset of the window for a partial match; and

responsive to a partial match being found with respect to the first and second prediction-bit subsets, applying a priority scheme to determine which of the partially matched prediction-bit subsets is used to substitute an enhancement pixel for the target pixel.

26. (New) The method of claim 25, wherein at least one of the first or second pixel-bit subsets includes the target pixel.

27. (New) The method of claim 25, wherein at least one of the first or second pixel-bit subsets includes pixels from the same line as the target pixel as well as pixels from at least one line above and at least one line below the target pixel.

28. (New) The method of claim 25, wherein the first prediction-bit subset includes a designation of the first pixel-bit subset for comparison, and the second prediction-bit subset includes a designation of the second pixel-bit subset for comparison.

29. (New) The method of claim 25, wherein each of the first and second templates include a respective enhancement pixel to be substituted for the target pixel when a partial match is found with the respective template.

30. (New) The method of claim 25, wherein the first and second templates are responsive to different partial match errors for the target pixel.

31. (New) A method of image enhancement employing partial-template matching, the method comprising:

storing consecutive lines of an image;

selecting from the image a window comprising a plurality of line segments of bits representing pixels, the window including a target pixel;

selecting at least one template from a plurality of templates, at least two of the templates of the plurality of templates corresponding to different partial match errors of the target pixel, and where each of the plurality of templates includes an enhancement pixel;

comparing a pixel-bit subset of the window with a prediction-bit subset of the at least one selected template for a partial match; and

responsive to a partial match being found, substituting the enhancement pixel of the at least one selected template for the target pixel.

32. (New) The method of claim 31, where a plurality of templates are selected for the partial match comparison.

33. (New) The method of claim 32, further comprising, in response to a partial match with more than one of the plurality of templates, applying a priority scheme to determine which of the partially matched templates will be used for substituting the target pixel with the enhanced pixel.

34. (New) The method of claim 31, where the pixel-bit subset includes the target pixel.

35. (New) The method of claim 31, where the pixel-bit subset further includes pixels from the same line as the target pixel as well as pixels from at least one line above and at least one line below the target pixel.